

### 4.3 Assessing Vulnerability: Identification of Assets and Development Trends

To understand risk, a community must evaluate what assets are exposed to hazard events. The inventory of assets considers the population, structures, and lifelines that could be impacted by hazard events. This section presents inventory data used for this risk assessment and discusses development trends in the area of interest. The consideration of development trends is important because areas of future development could increase the inventory that is exposed and that could be lost should a hazard event occur.

#### 4.3.1 Background on Inventory of Assets

Inventory data quantify the people, places, and things that could be injured, damaged, or destroyed during the occurrence of a hazard.

Because HAZUS-MH was used to support this mitigation plan, HAZUS-MH provided data was used as a starting point for inventory data. HAZUS-MH includes a range of asset data based on national and regional data sets, such as the U.S.

Census for population data and Dun & Bradstreet and other data for building stock and value estimates. Potential areas where local data might supplement or refine the nationally provided data were identified by the planning committee. Assistance from the planning committee, various Town of Clay departments (highways, planning and zoning, public works), local emergency management personnel, the Syracuse-Onondaga County Planning Agency (SOCPA), and others was then used to collect additional data. The mitigation planning contractor then reviewed this data with the planning committee and selected data for inclusion, focusing on critical and essential facilities first. These facilities include schools, hospitals, and other buildings that are critical to community functions and recovery after a hazard event. County-level building and facility data were used to supplement the HAZUS-MH-provided data for individual, site-specific critical facility categories, as well as to supplement building inventory data.

Appendix C of this mitigation plan, *Data Summary Matrix*, provides a detailed summary of the data collection efforts and data sets selected for this mitigation plan. At the time of plan preparation, these represented the best available data to support the plan; long term data improvement plans were discussed and are presented in Section 5, Mitigation Strategy. As the risk assessment and plan are revised over time, data will be updated and refined, using the actions described in Section 5.

HAZUS-MH includes data for a number of asset categories, including population, buildings, infrastructure, and lifelines. The **built environment** includes these buildings, infrastructure, and lifelines. HAZUS-MH uses **occupancy classes** to categorize buildings as commercial, residential, industrial, government, or "other".

The databases included in HAZUS-MH are called **provided data** and allow users to run a preliminary analysis without collecting or using local data. Examples of HAZUS-MH provided data include building data, transportation lifeline data, population data, and critical facility information. For the Town of Clay, a range of local and other data were reviewed and, where feasible, local data was used to supplement the HAZUS-MH provided data, as discussed in this section.

#### 4.3.2 Town of Clay Specific Inventory Considerations

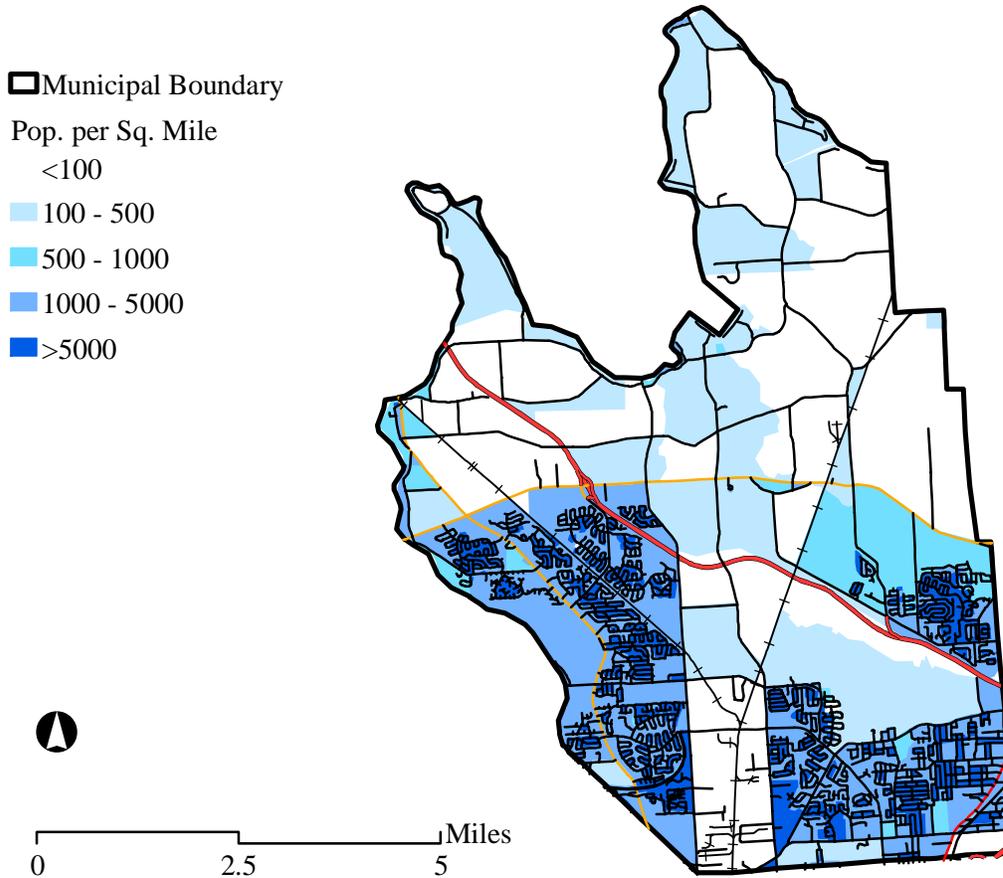
Inventory data for the Town of Clay are discussed under the following categories: (1) population, (2) general building stock (aggregate inventory), and (3) critical facilities (site-specific inventory). Each of these categories is discussed in this section.

##### 4.3.2.1 Population and Demographics

According to the 2000 U.S. Census, the Town of Clay had a population of 58,805 people. The "2003 Street Map of the Town of Clay" identified Clay as the 17th largest town in New York State with a population of 59,094 (comparable to Binghamton and Troy), while the current estimate is approximately 60,000. This is

in agreement with the data included in HAZUS-MH (2000 census population of 58,805), and thus it was determined that HAZUS-MH population data would be used without modification. Figure 4-3-1 shows the distribution of the general population for the Town of Clay by Census Block.

Figure 4-3-1. Distribution of General Population for the Town of Clay Study Area by Census Block



DMA 2000 also requires that plans consider socially vulnerable populations. Socially vulnerable populations are most susceptible to being impacted by hazard events, based on a number of factors including their physical and financial ability to react or respond during a hazard and the location and construction quality of their housing. This Plan considers two socially vulnerable populations considered for this plan, (1) the elderly (persons over the age of 65) and (2) low-income (persons living in households with an annual household income below \$20,000 per year).

According to the 2000 Census, the Town of Clay has 5,472 persons over the age of 65 (9.3% of total population), and 2,885 persons with incomes below \$20,000 per year (4.9% of total population). Figure 4-3-2 shows the distribution of persons over age 65 in the Town of Clay, while Figure 4-3-3 shows the distribution of low income persons.

The Planning Group indicated that there are senior apartments (Byrne Manor) located on Pine Hollow Drive, as well as the Park Rose Estates on Buckley Road.

Figure 4-3-2. Distribution of Persons over the Age of 65

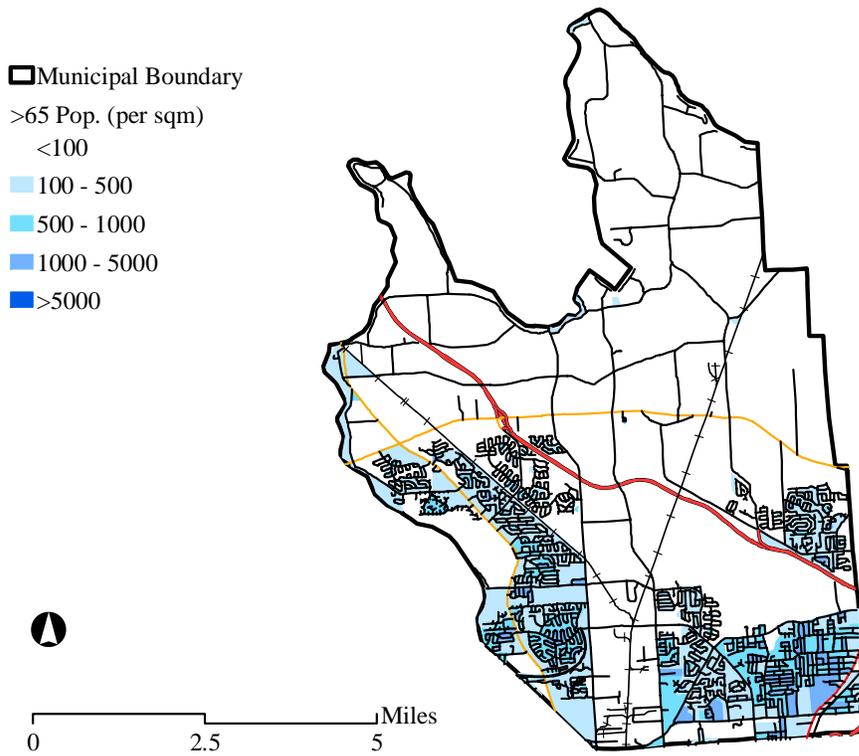
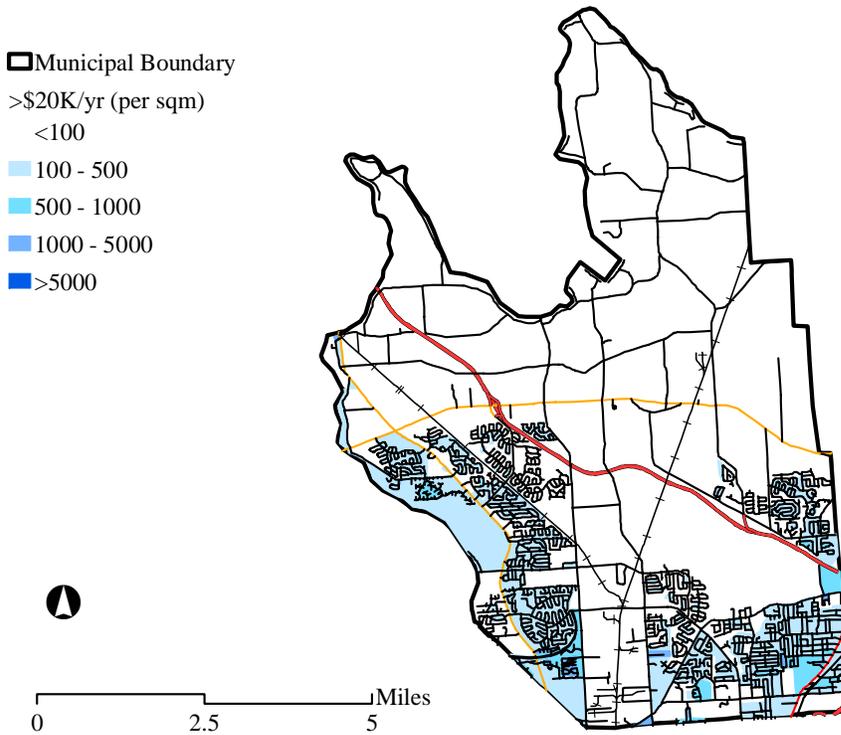


Figure 4-3-3. Distribution of Persons with income under \$20K/year



### 4.3.2.2 General Building Stock

The Town of Clay reports (“2003 Street Map of the Town of Clay”) that there are 17,162 homes in Clay with a median selling price in 2002 of \$127,900. Industrial areas in Clay include the 1,900-acre Woodard Industrial Park and the 1,150-acre Clay Industrial Park.

To support this analysis, the “Onondaga Common Place File” dataset provided by the Syracuse-Onondaga County Planning Agency (SOCPA) GIS Department was referenced and incorporated as possible. This dataset was very useful in identifying the locations of many essential and critical facilities, as well as many infrastructure features (dams, communication towers, treatment plants, etc.). However, as it generally identified place locations rather than specific structures, its utility to provide building inventory data was limited. In the future, the Town of Clay will consider collecting additional attributed data for buildings and combining available local data with HAZUS-MH regional building classification data to group buildings into general occupancy classes (such as residential, commercial, and industrial). Such efforts are facilitated by the use of the HAZUS-MH building information tool (BIT) provided with HAZUS-MH. The team also reviewed data provided with HAZUS-MH.

The data in HAZUS-MH estimates that there are 17,380 buildings in the Town of Clay with a total building replacement value (excluding contents) of \$3,493 million (2002 dollars). Approximately 99% of the buildings (and 84% of the building value) are associated with residential housing.

Table 4-3-1 presents the estimated number of buildings and dollar value of these buildings by occupancy class for the Town of Clay, based on HAZUS-MH default data.

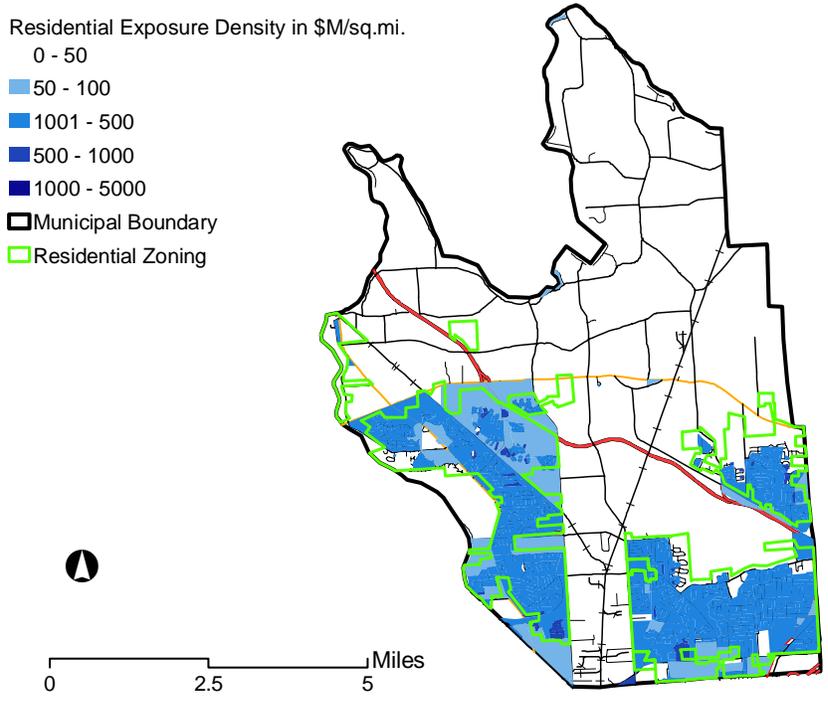
Table 4-3-1. Building Stock Statistics by Occupancy Class

| Building Occupancy Class | Number of Buildings | Exposure Value  | Percent of Total |
|--------------------------|---------------------|-----------------|------------------|
| Residential              | 17,162              | \$ 2.92 Billion | 83.7%            |
| Commercial               | 215                 | \$ 0.45 Billion | 12.7%            |
| Industrial               | 27                  | \$ 80.2 Million | 2.3%             |
| Agricultural             | 75 (2)              | \$4.2 Million   | 0.1%             |
| Religious                | 34 (1)              | \$ 22.4 Million | 0.6%             |
| Government               | 14 (2)              | \$ 1.7 million  | 0.0%             |
| Educational              | 12 (2)              | \$ 14.8 Million | 0.4%             |

Sources: Data presented is HAZUS-MH default data (2000), except: (1) Syracuse-Onondaga County Planning Agency, (2) Town of Clay Department of Planning and Development. Note: The building values shown do not include building contents. Generally, contents for residential structures are valued at about 50 percent of the building’s value. For commercial facilities, the value of the content is generally about equal to the building’s structural value.

Figures 4-3-4 shows the distribution and exposure density of residential buildings in the Town of Clay. Exposure density is the dollar value of structures per unit area, exclusive of the building content value. The following structural exposure densities are shown in units of \$1,000,000 (\$M) per square mile. Figure 4-3-5 shows the distribution of manufactured housing, primarily mobile homes, which is a subset of the residential building class. Figures 4-3-6 and 4-3-7 show the distribution and exposure density of buildings in the commercial and industrial occupancy categories, respectively. Viewing distribution maps can help communities evaluate aspects of the study area in relation to the specific hazards

Figure 4-3-4. Distribution of Residential Building Stock and Exposure Density



HAZUS-MH data indicates that there are 831 manufactured homes in the Town of Clay, distributed as shown on Figure 4-3-5. The Town of Clay Planning Department has indicated that as of May 2005, there are 494 mobile homes in the Casual Estates Park along the Seneca River with plans for this to increase to 735 units.

Figure 4-3-5. Manufactured Housing in the Town of Clay

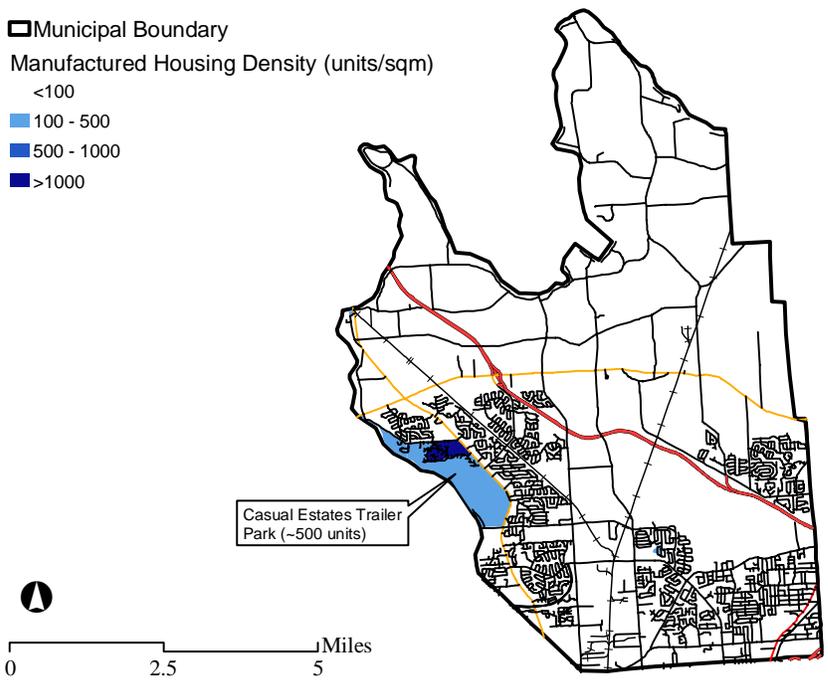


Figure 4-3-6. Distribution of Commercial Building Stock and Exposure Density

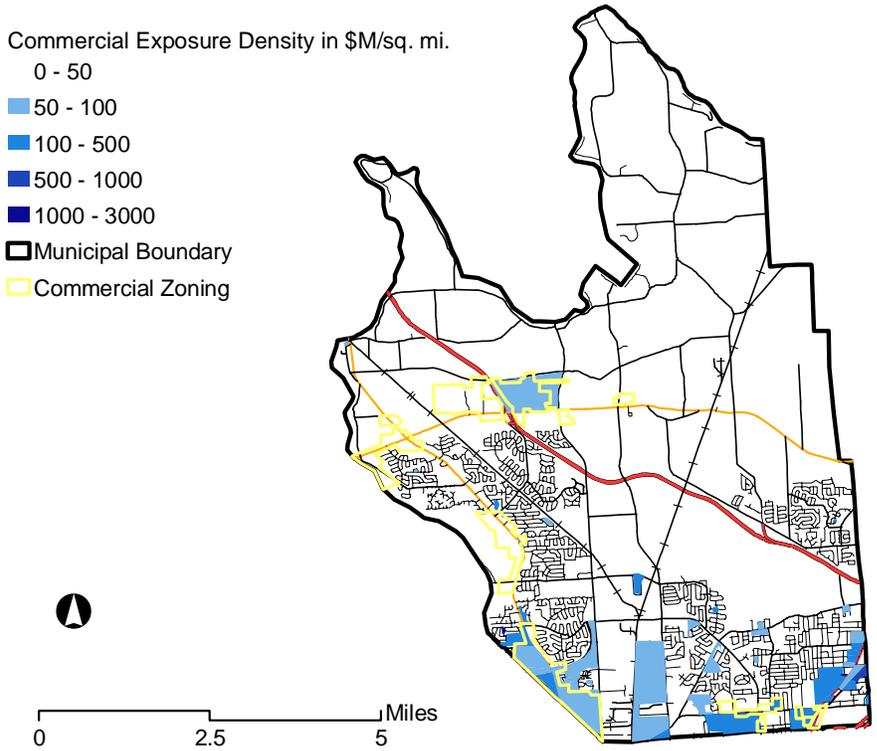
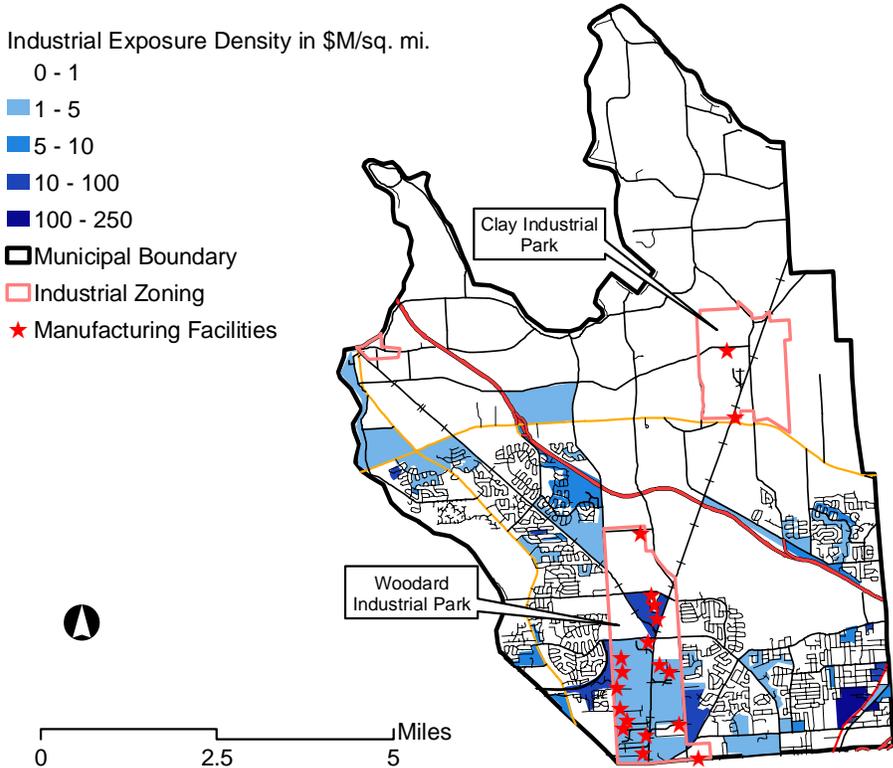


Figure 4-3-7. Distribution of Industrial Building Stock and Exposure Density



The SOCPA “Common Places” dataset identified nineteen manufacturing (industrial) facilities in the Town of Clay, indicated on Figure 4-3-7. These include the following facilities: Learbury’s (now defunct and occupied by “Syracuse Plastics” per the Planning Group, 2005), Gaylord Brothers, Precision Systems, OFK Wood, American Steel and Aluminum, WT Motto, Tenneco Packaging, SSAC, Old Crouse Hinds, Goguen Industries, Nutreena Feed, Nagle Sealcoating, TP Drumm, Roberts Office Furniture, MS Kennedy, Edgecomb Metals (no longer there, per the Planning Group – 2005), Eagle Comtronics (2 facilities per the Planning Group – 2005), and What’s Your Sign. All of these facilities are located in the Woodard Industrial Park, except for What’s Your Sign and OFK Wood which are located in the Clay Industrial Park along Route 31.

With respect to agricultural assets in the Town of Clay, there is one active dairy farm and several horse farms in addition to moderately sized areas of croplands.

Once the overall asset inventory has been established, the portion of the inventory that is at risk of being impacted by the various hazards is identified. This “at-risk” subset can be identified by overlaying the hazard area (for example, flood zone) with the asset data to estimate the assets at risk. For example, areas of residential development may be compared with flood zones to determine the locations and number of structures at risk of damage or destruction from flooding. Understanding vulnerable assets can help guide mitigation strategies and efforts. Hazard exposure and loss estimates in Section 4.4 use this approach.

#### **4.3.2.3 Critical Facilities**

Critical facilities are defined in Appendix B, the Glossary, and include essential facilities, transportation systems, lifeline utility systems, high potential loss facilities, and hazardous material (HazMat) facilities. Transportation systems include roadways, bridges, tunnel, airways, and waterways. Lifelines utility systems include potable water, wastewater, oil, natural gas, electric power facilities, and emergency communication systems. As with essential facilities, SOCPA data along with various datasets accessed on the New York State GIS Data Clearinghouse were used to supplement the HAZUS-MH default inventory.

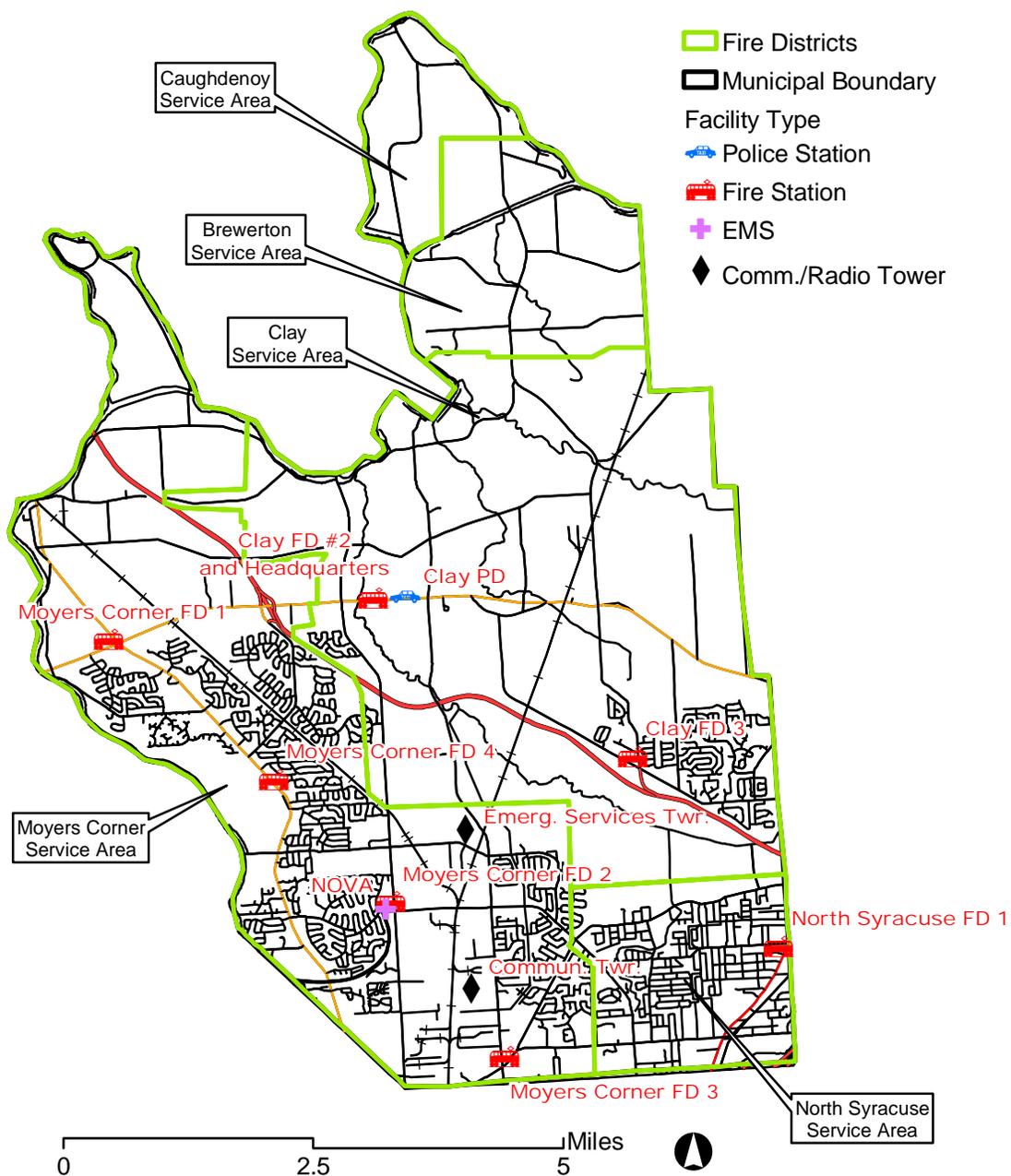
SOCPA data for critical facilities, transportation systems, and utilities was evaluated against HAZUS-MH default data for possible inclusion into risk assessment. Most features are from SOCPA data, while valuation data is from HAZUS-MH. Additional valuation data is required and the planning group will develop a methodology either to collect the outstanding data or to calculate the values based on established means from federal and state agencies on the valuation of the critical infrastructure identified. For example, if the average cost of a roadway mile, railway segments, potable water piping, etc. were identified, then the valuation could be calculated based on this information. Resources for obtaining this information include the Federal Highway Administration, DOT, and GSA. For other critical infrastructure similar agencies relative to the type of infrastructure will be contacted to obtain this information to estimate these values. These “next step” items are included as mitigation activities in Section 5 of this plan.

##### **4.3.2.3.1 Essential Facilities**

#### **Emergency Facilities:**

Figure 4-3-8 shows the location of the police station, fire stations, fire protective areas, EMS and emergency communication facilities in the Town of Clay.

Figure 4-3-8. Emergency Facilities in Town of Clay



The Clay and Moyers Corners Fire Departments protect approximately 80% of the town. Contracts with the Brewerton, Caughdenoy and North Syracuse Fire Departments cover the remaining 20% of the town. A vast majority of the town is serviced by the municipal water system, capable of meeting the water demands of fire-fighting.

Fire department apparatus is current and meets ISO standards. The ISO rating is a tool developed to help communities evaluate their fire departments. It has a set countrywide standard to gauge fire protection. It can be used as a tool to help fire departments plan and budget for facilities, equipment and training. It helps provide reliable information on the fire protection service in an area. This information in turn allows insurance companies to set the appropriate fire insurance premiums for residential and commercial

properties. The ISO “Fire Suppressions Rating Schedule” sets the criteria for the evaluation of the firefighting abilities of the community. It evaluates the ability to communicate alarms. It evaluates the fire departments equipment, training, maintenance and equipment testing. It evaluates the department’s ability to respond to alarms and their ability to have sufficient personnel present. Also evaluated is the ability to supply water to the scene of the alarm in the proper quantity to fight the fire. A department is graded and given a score the lower scores in turn equate to better fire protection and the ability to respond to and handle emergencies. The lower the score the better the insurance rates within the area. All combined this criteria gives departments a better idea of how they compare to set standards and gives them the information to improve.

Training is provided weekly by fire department instructors certified by the NY State Office of Fire Prevention and Control, and meets Public Employees Safety and Health Standards (PESH OSHA). The Onondaga County Fire Investigation Unit and the Town of Clay Police investigate all structure fires.

The Town of Clay is served by a single police station, located within the general municipal complex on Route 31. The Onondaga County Sheriff’s North Substation is located at Henry Clay Boulevard and Metro Boulevard.

Emergency medical services (EMS) are provided by two EMS operators. The portion of town north of Rt. 481 is serviced by NAVAC, while the portion of town south of 481 is serviced by Nova located along Buckley Road.

An 800-mHz emergency services tower (fire and EMS) is located just to the north of the Woodard Industrial Park, and a radio tower is located within the Woodard Industrial Park. Figure 4-3-8 Emergency Facilities in Town of Clay

**Hospitals and Medical Centers:**

There are no formal hospitals in the Town of Clay; the closest hospitals are the St. Joseph’s Hospital, the SUNY Upstate Medical Center, and the Crouse-Irving Memorial Hospital, all located near the intersection of I-81 and I-690, about five miles south of Clay. The North Medical Center (including emergency medical care) is located near the corner of W. Taft and Buckley Roads. St. Joseph’s Cardiac Rehabilitation Center is located just to the west of the North Medical Center area, along W. Taft Road. The Committee further identified the Clay Medical Center on Soule Road, Belgian Meadows on Rt. 31 and Gaskin Road, and Drakers (Sommerwood) on Buckley Road.

Figure 4-3-9 shows the non-emergency essential facilities in the Town of Clay, which, for the purposes of this Plan, include schools, colleges, senior living and senior care facilities, hospitals and health care facilities.

**Shelters:**

The American Red Cross has selected the Morgan Road Complex (elementary and 9<sup>th</sup> grade annex), Liverpool Middle School, Chestnut Hill Middle School, Chestnut Hill Elementary School and the Liverpool High School as designated emergency shelters. The shelter capacity of each is identified as follows:

|                                 |     |
|---------------------------------|-----|
| Morgan Road Complex             | 635 |
| Liverpool Middle School         | 261 |
| Chestnut Hill Elementary School | 180 |
| Chestnut Hill Middle School     | 150 |
| Liverpool High School           | 920 |

Of these, only the High School and Morgan Road complex have generators. Willowfield and Elmcrest Elementary Schools also have generators but are not designated as emergency shelters by the ARC. Further, these four schools are the only schools wired to accommodate generators. (source: Oct. 13, 2004 letter from Mark Lawson, VP Board of Ed, Liverpool Central School District to June Baycura, Bayberry Community Association).

According to John Wassel of SOARC, per New York State law all schools may be opened as emergency shelters if requested by emergency mandate.

### **Schools:**

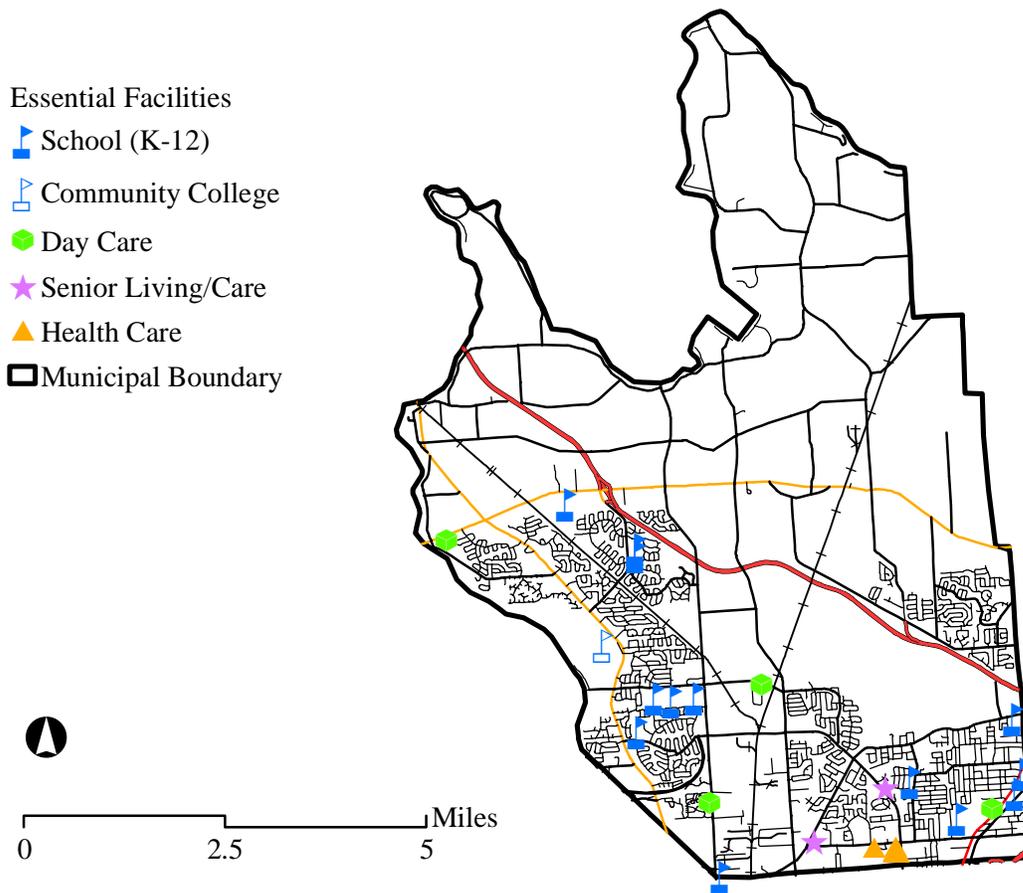
According to the SOCPA data, there are nine (9) K-12 level schools in the Town of Clay, including Willowfield Elementary School (ES), Soule Road ES, Soule Road Middle School (MS), Wetzel Road ES, Morgan ES, Allen Road ES, North Syracuse JR High School (HS), Liverpool HS, and Bear Road ES.

Two (w) school districts cover the town; the Liverpool Central School district, and the Cicero-North Syracuse (CNS) school district.

Three post-secondary schools were identified in the Town, as follows:

- Onondaga Community College satellite campus at 8015 Oswego Road
- Bryant & Stratton Business Technical College at 8687 Carling Road
- BOCES at 4500 Crown Road.

Figure 4-3-9. Non-Emergency Essential Facilities in Town of Clay



### Day Care Facilities:

The Department of Planning and Development identified the following day care facilities in the Town of Clay:

- BASCOL Inc., 4610 Wetzel Road, Liverpool
- Childtime Learning Center, 7453-1/2 Morgan Road, Liverpool
- Childtime Learning Center, 5112 W. Taft Road, Liverpool
- Immanuel Lutheran Church, 4947 State Route 31, Clay
- Koala Day Care, 3448 State Route 31, Baldwinsville
- Learning Universe, 3787 Canvassback Drive, Liverpool
- Northminster Church, 7444 Buckley Road, North Syracuse
- St. Elizabeth Ann Seton Church, 3494 State Route 31, Baldwinsville
- Tutor Time, 4155 State Route 31, Great Northern Mall, Clay

### Adult Care and Adult Living Facilities:

Buckley Landing Apartments and Byrne Manor are identified as Senior Apartments (senior living), while the Birchwood Health Care facility is the only senior care facility in the SOCPA data dataset.

#### 4.3.2.3.2 Transportation Systems

New York State Route 481 runs for nearly 17 miles in a northwest-southeast direction through the center of the Town of Clay. New York State Route 31 runs approximately 7.8 miles east-west through the central portion of the town. County Route 57 (aka Oswego Road, formerly State Route 57,) runs approximately 6.6 miles northwest-southeast paralleling the southwestern portion of the town. There are approximately 93 miles of secondary and 164 miles of tertiary roads in the town (See Figures 4-3-10 and 4-3-11).

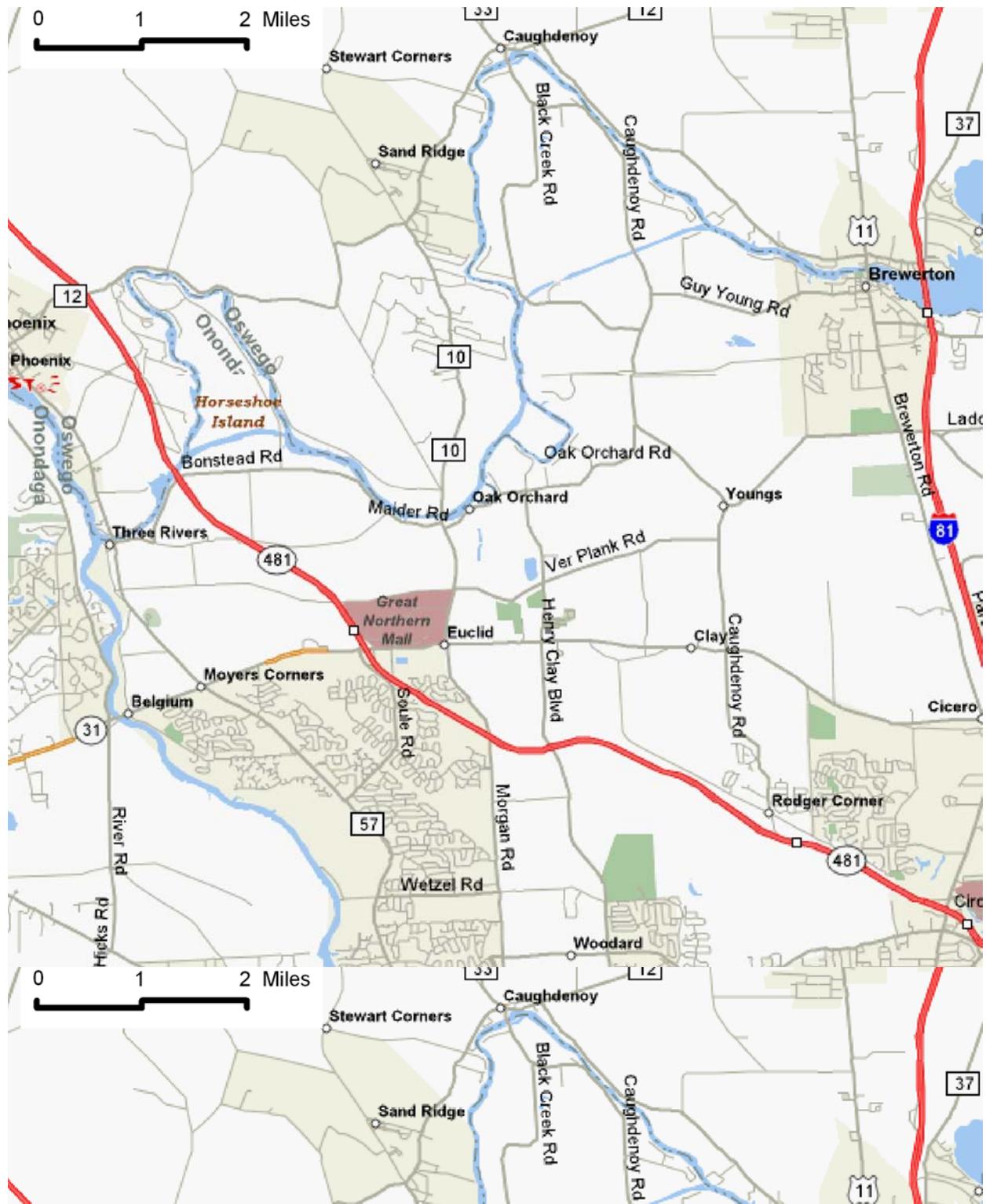
Major routes to and from the Town of Clay are Interstate 90 running east-west just south of the town, or Interstate 81 which runs north-south skirting the eastern border of town. Route 481 is the eastern beltway for Interstate 81, while Route 690 forms a southern beltway for I-90 along the south side of Onondaga Lake. The CSX (Montreal) freight railway runs north-south from the south side of town to a point just north of Buckley Road where it splits into two branches. The CSX Fulton branch (Fulton-Oswego Line) then continues north-northwest, while the CSX Montreal branch continues north-northeast through the central portion of the Town of Clay. These rail lines total a little over 17 miles within the town. A single CSX freight line station is located where the lines split just north of Buckley Road.

There are no commercial airport facilities in the Town of Clay; however the Syracuse Hancock International Airport is located on the west side of the city of Syracuse, southeast of the Town of Clay.

Figure 4-3-10 Regional Transportation Lifelines



Figure 4-3-11 Local Transportation Lifelines



### 4.3.2.3.3 Lifeline Utility Systems

Due to heightened security concerns, local utility data sufficient to complete the analysis have only partially been obtained. Utility system data that were available through HAZUS-MH were not considered sufficient to support accurate loss estimates. The SOCPA provided mapping of certain utility appurtenances, specifically potable water tanks and pumping stations, wastewater treatment facilities and pump stations, potable water and sanitary sewer piping, and electrical substations, however this dataset only provided location without attribution for valuation

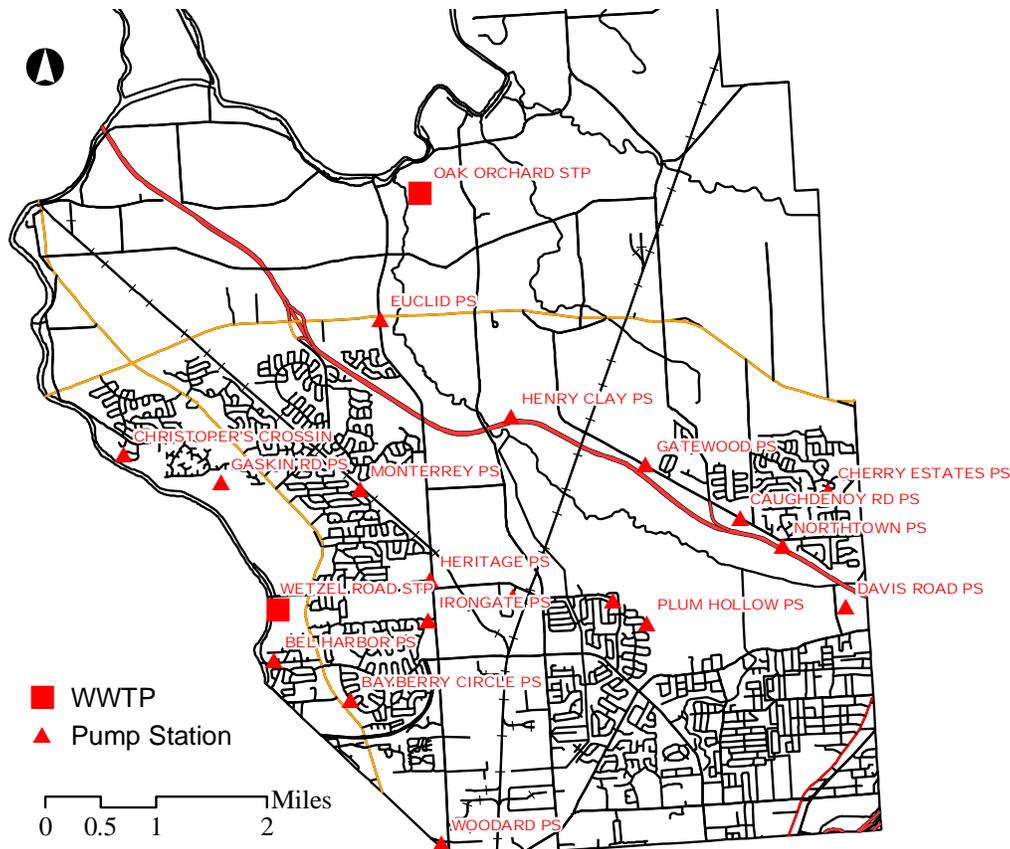
#### Potable Water Supply:

The vast majority of the Town of Clay is serviced by municipal water. The SOCPA provided data identified several significant potable water supply features. A water tank and the Henry Clay potable water pumping station are located near the intersection of Henry Clay Boulevard and Crossroads Park Drive. The Terminal Reservoir is located to the southeast of the intersection of I-481 and Route 31, as is the Metro Water Board.

#### Wastewater Facilities:

The majority of the Town of Clay residences and businesses are connected to the city sewer system. The SOCPA dataset identified two wastewater treatment plants (Wetzel Road and Oak Orchard), and eighteen (18) pumping stations, as shown on Figure 4-3-12

Figure 4-3-12 Wastewater Utilities in Town of Clay



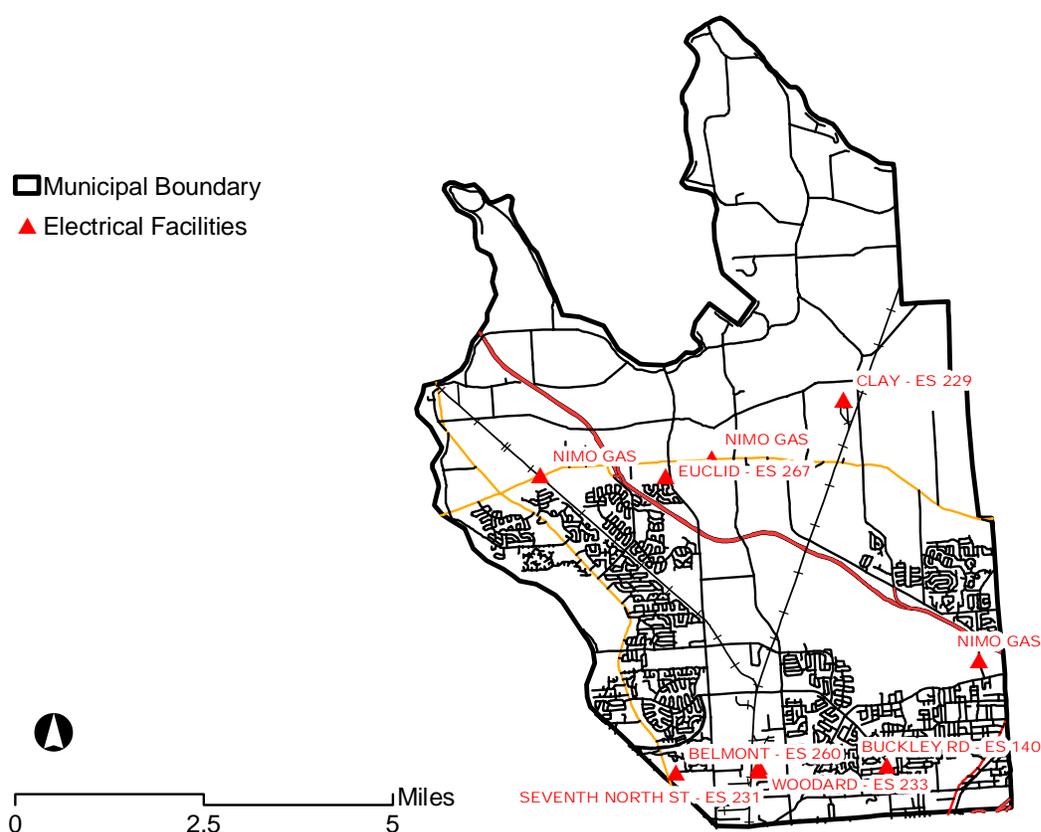
While the Wetzel Road treatment plant is located in the 100-year floodplain of the Seneca River, the Planning Committee indicates that it is actually located on the only high ground in this area. Further, the Committee indicated that the Wetzel Road WWTP experienced no impacts during the 1993 flooding (most severe on current record).

### Electrical Power Facilities:

The SOCPA dataset identified six (6) electrical substations and two (2) Niagara-Mohawk (NIMO) gas facilities in the Town of Clay, as shown on Figure 4-3-13.

The Planning Group further indicated that water turbine electric generators are located at the flood gates of dams such as the one at Phoenix, however these are not located within the Town of Clay.

Figure 4-3-13 Energy Utilities in the Town of Clay



### Fuel and Natural Gas Pipelines:

The Pipeline Group – Midwest, Inc. provided generalized mapping of their pipeline network. On a map entitled “Buckeye Partners System Map – Onondaga County, NY”, there is a Buckeye Pipeline that runs from the Liverpool Terminal at the northwest end of Lake Onondaga, northeast across the Town to the Brewerton Terminal at the west end of Oneida Lake. Another section of the Buckeye Pipeline runs from the Liverpool Terminal to the Town of Salina, skirting the southwest corner of the Town of Clay. These pipelines are capable of carrying all liquid petroleum products, including fuel oil and gasoline.

#### 4.3.2.3.4 High-Potential Loss Facilities:

High-potential loss facilities include dams, levees, nuclear power plants and military installations. The HAZUS-MH default data identify two dams in the Town of Clay. The Terminal Reservoir, located near the southeast corner of I-481 and Route 31, appears to be classified as a “dam”, however the Planning Group characterizes this as a surface water impoundment. Another dam, identified as the “Willow Stream Dam” is located on a tributary of the Seneca River in the Willow Stream Wood Subdivision near Rt.57/Oswego Road and Redwing Drive. (See Figure 4-3-8) This dam is indicated as being owned by the Town of Clay, with a Hazard Class of “S”.

A “Major Dams of New York” dataset, provided by the U.S. Army Corps of Engineers (USACE), did not identify any “major” dams in the town. The “Major Dams” information came from the National Inventory of Dams (NID) which was produced by USACE in cooperation with FEMA’s National Dam Safety Program, and includes dams of 50 feet or more in height, or with a normal storage capacity of 5,000 acre-feet or more, or with a maximum storage capacity of 25,000 acre-feet or more. It is noted, however, that the Caughdenoy Dam, located on the Oneida River in Oswego County just north of the northeast tip of Clay, is identified as a major dam, used for navigation, owned by the NYS DOT Waterways Maintenance Subdivision, and classified as having a “Significant” Downstream Hazard Potential. Per the “National Inventory of Dams – Methodology – State and Federal Agency Manual”, Version 3.0 dated July 2005, the Downstream Hazard Potential definition of a “Significant Hazard Potential” is as follows:

*“Dams assigned the significant hazard potential classification are those dams where failure or mis-operations results in no probably loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be located in areas with population and significant infrastructure.”*

There are no levees in the Town of Clay (Planning Group – 2005).

The Nine Mile Nuclear power plant (3 reactors), the nearest such facility, is located in the Town of Scriba on the south shore of Lake Ontario, approximately 35 miles to the north. The Planning Group noted that State Fairgrounds are the designated reception area for Oswego County residents in the case of an emergency evacuation due to the Nine Mile Nuclear power plant, and that a large amount of these residents would use Route 481 through the Town of Clay during such an evacuation.

#### 4.3.2.3.5 Haz-Mat Facilities:

While the HAZUS-MH default data identifies three hazardous materials facilities in the Town of Clay, specifically Osmonics – Syracuse Facility, Cargill, Inc., and Rollaway Bearing Corporation, the Planning Committee indicated that an environmental laboratory now occupies the former Osmonics facility, and Rollaway Bearing is no longer in operation either. A company called “Emerald” who manufactures recycling equipment is to occupy the former Rollaway Bearings facility. Cargill is listed in the HAZUS-MH default data as follows:

Cargill, Inc. – Animal Nutrition; 7700 Maltage Drive, SIC Code 2048 (Establishments primarily engaged in manufacturing prepared feeds and feed ingredients and adjuncts for animals and fowls, except dogs and cats), managing zinc and manganese compounds

EPA data for Toxic Release Inventory (TRI) facilities were used to identify major hazardous material (HazMat) facilities (fixed) in the mitigation planning study area. TRI regulations impact facilities that use, store, or emit greater than the specified amounts of TRI-regulated chemicals. The USEPA Toxics Release

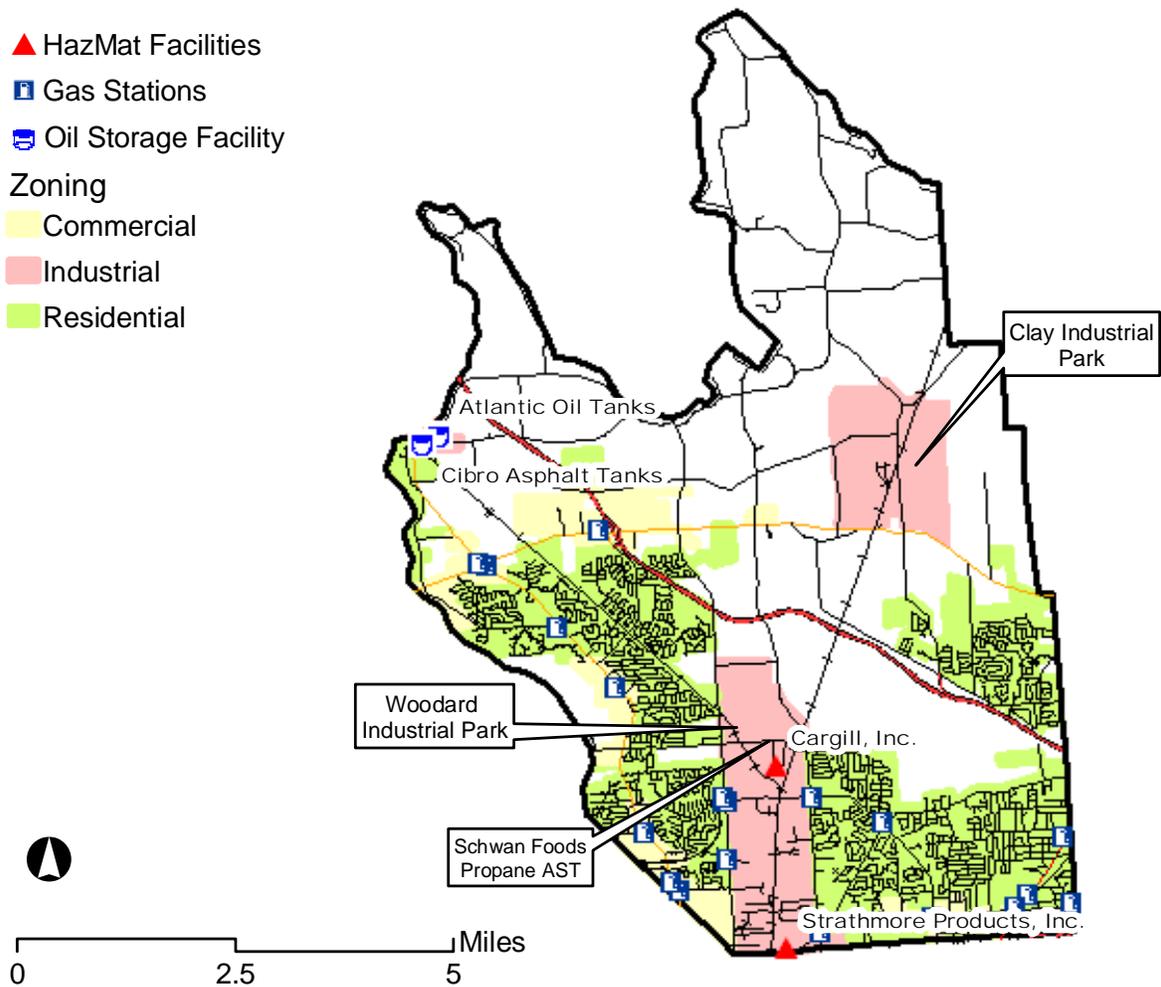
Inventory database identified a single listing for the Town of Clay. The Strathmore Products, Inc. on Burr Road in the Woodard Industrial Park handles several volatile organic compounds including toluene, xylene, n-butyl alcohol, methyl ethyl ketone (MEK), glycol ethers and trimethylbenzene. These compounds are common groundwater contaminants, toxic and generally flammable.

Figure 4-3-14 shows the locations of these HazMat facilities along with zoning classifications per the Town of Clay Planning and Development. This mapping indicates that these facilities are all located within areas zoned industrial or commercial.

Other facilities in the town manage hazardous materials, including home supply stores, paint supplies, and oil storage/distribution facilities and gas stations. Oil storage/distribution facilities (2) and gas stations, as identified in the SOCPA “Common Places” dataset, are also indicated on Figure 4-3-14.

The Planning Committee identified that a large aboveground propane tank was recently installed on Wetzel Road and Goguen Drive, servicing the Schwan frozen food plant. Further, the Committee indicated that while the asphalt emulsions tanks on the inactive Cibro property are no longer in active service, they have not been emptied, cleaned and decommissioned.

Figure 4-3-14 Haz-Mat Facilities in Town of Clay



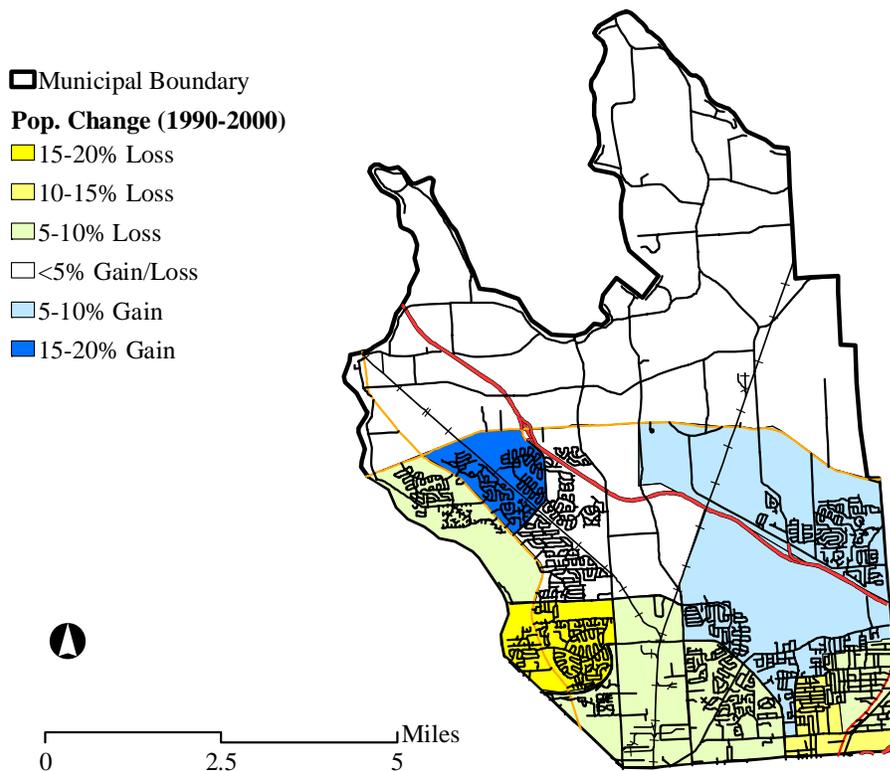
## Analyzing Population and Development Trends

This mitigation plan provides a general overview of population and land uses and the types of development occurring within the study area. This section discusses existing and proposed land uses as well as development trends and future changes that could significantly change the character of the area. This information provides a basis for making decisions on the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support planning decisions regarding future development in vulnerable areas.

### Population

According to the 1990 and 2000 Census data, the Town of Clay experienced a 1.6 % decrease in total population, from 59,739 in 1990 to 58,805 in 2000. Clay reported the population at 59,094 in 2003, a 0.5% increase from the year 2000, and estimated the current (2005) population at over 60,000. The 1970 U.S. Census recorded the Town of Clay population of 36,274. Figure 4-3-15 shows those areas that experienced population change between 1990 and 2000.

Figure 4-3-15 Population Change in Town of Clay (1990-2000)

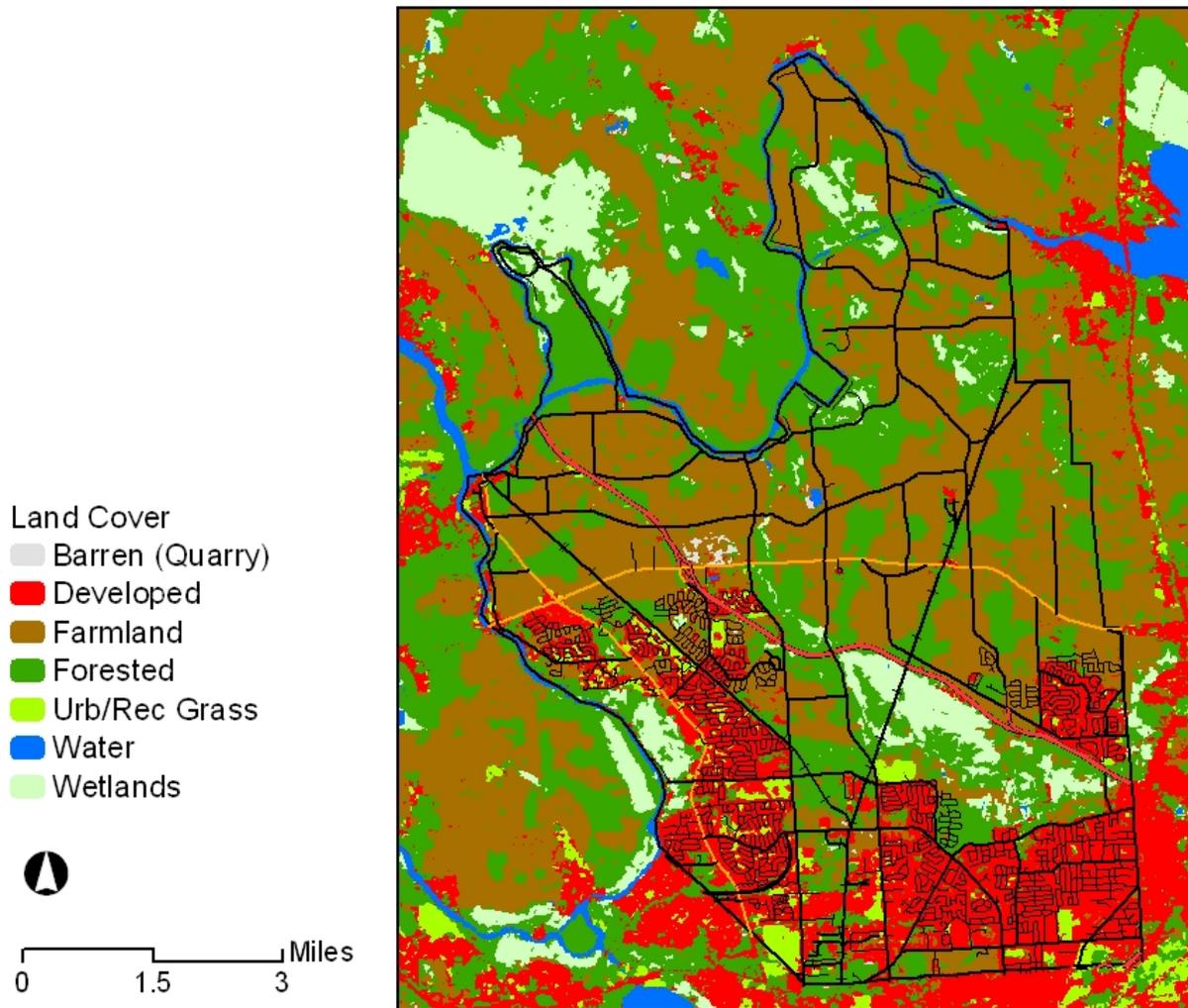


The “Framework for Growth” report (SOCPA, 1998) indicated that the county’s population has remained relatively stable into 1970, and that a small but steady rise in the County’s population is expected during the period from 1990 to 2010. This study indicated that the number of young adults in the County (ages 20-34) is expected to decrease slightly during the period 2000-2010, while 35-44 age group is expected to decrease 18% during this period. The 45-64 age group is expected to increase 26% over this period. While the 65+ population is expected to increase a moderate 6% during 2000-2010, the 85+ population is expected to increase a rapid 44%. This has implications for hazard planning as a greater part of the population becomes part of the socially vulnerable population.

## Land Use

Land use regulatory authority is vested in New York State's towns, villages, and cities. However, many development and preservation issues transcend local political boundaries. The Town of Clay's land cover can be divided into five major categories. In descending order of size, the first category is agriculture, including crops, pastures and inactive farmland at 39 percent coverage. The second category is forest, which makes up approximately 31 percent of the study area. The third category is developed usage, including residential, commercial, industrial, transportation, and recreational at 24 percent. Water and wetland areas occupy approximately 1.1 and 5.8 percent of Clay's land cover, respectively.

Figure 4-3-16 Study Area Land Cover



As can be seen on Figure 4-3-16, development in the Town of Clay is predominately in the southern half of the town, and generally on the south side of I-481. Farmlands are generally limited to the northern half of the town. Clay Marsh (aka. Peat Swamp area), a major contiguous wetland complex located just south of I-481 east of Henry Clay Boulevard, is surrounded by dense development on all but the north side.

## Land Use Projections and Goals

By projecting land use, the town can evaluate if future land use and could increase exposure to hazards and can plan to mitigate potential impacts as part of the development planning process. The following facts and opinions concerning growth and development in the Town of Clay is excerpted from an interview with Mark Rupprecht, Town of Clay Supervisor, as published in an article in the Oswego County Business Magazine (online), Special Report Aug/Sept 2004, entitled "CNY's Fastest Growing Corridor".

Significant growth in the Town of Clay (and adjacent Cicero) is expected, but not at the same rate as the last two years. Nearly \$49 million was invested in the Town of Clay in 2003, \$18.7 million of which was in single-family homes, representing a slight increase from 2002. Tripod.com, a central New York commercial/industrial website, currently reports that Clay averages over 120 single family building permits each year.

Over the last two years, major commercial businesses established themselves in the town, including Target, Home Depot, Barnes and Noble Booksellers, Bed, Bath, & Beyond, TJ Maxx and numerous restaurants, turning the Route 31 corridor into one of the fastest growing areas in Onondaga County. However, growth along Rt. 31 is expected to gradually decrease.

Recent development along Rt. 31 has been in the stretch from Morgan Road east of the Route 481 interchange to county Route 57, about three miles to the west. Development in both directions has necessitating the widening of Route 31 approaching and at the Morgan Road intersection. Some "rather large land sales," north of 31 toward Oswego County suggest future development in that area.

The Town of Clay recently acquired 67 acres in the Three Rivers area, where the Oswego, Seneca, and Oneida rivers meet. This is the site of the former Cibro asphalt plant, and the now demolished Three Rivers Apartments. Anticipated for this area is the construction of a mixed-use complex of both residential and commercial facilities with access to the river separating Onondaga and Oswego counties.

Also proposed is a railway service that would run from Carousel Center or the transportation center in Syracuse through the Town of Clay and eventually further north to Oswego. For the idea to become a reality, a pedestrian tunnel would have to be built at either the mall or transportation center. The service could be used for special events such as sporting contests to the Dome and P&C Stadium and festivals such as Harborfest.

Although not town of Clay properties, the town is heavily promoting two industrial parks, Rupprecht said. If the railway system were to come fruition, commuter service could also be available for workers at these centers. The supervisor said he wasn't sure if everyone would agree with the need for such a service

The Woodard Industrial Park ([www.woodardindustrialpark](http://www.woodardindustrialpark)) has been an active development center in Clay for over 50 years. Companies such as Edgecomb Steel, National Grid, Eckerd, and Eagle Comtronics are currently situated in the park, while still has available existing facilities, including portions of a Free Trade Zone. "We will work with new tenants to obtain Empire Zone designations from the County Industrial Development Agency," Rupprecht said. Rail service via CSX on the Montreal Line is available and is five miles from the Mainline tying Chicago to Boston.

The Clay Industrial Park ([www.clayindustrialpark.com](http://www.clayindustrialpark.com)) is a 250-acre site on Route 31. The Onondaga County Industrial Development Agency is obtaining title to the areas within the park to make it shovel ready, Rupprecht said.

As detailed in the "Framework for Growth" report (SOCPA, 1998), employment in manufacturing has declined from a high point in 1966, with the decline centered in the durables sector, and now represents the

fourth largest employer in Onondaga County. Despite these declines, the manufacturing sector is expected to remain a major employer in the County.

The towns of Clay and Cicero are undertaking a joint land use study to determine future uses of lands adjoining the park in order to preserve the integrity of the park for jobs and economic development. "We are seeking employers willing to bring 500-1,000 employees per shift," the Clay supervisor said. The park is accessible to major interstates and the New York State Thruway, is served by the CSX Montreal Line and is 10 miles from the Main Line connecting Boston to Chicago, according to Rupprecht.

Regarding residential development, a request has been brought recently to the town planning board for new housing in the Soule Road area, and the project proposed by Michael Bragman on the town lines of Clay and Cicero is still alive, despite some controversy, Rupprecht said. "These homes could help to revitalize the Brewerton area," the supervisor said of the Bragman project. When completed, the homes could sell between \$250,000 to \$750,000, according to Rupprecht, each with canals and docking large enough for a 40-foot long boat. The supervisor said that Bragman was working with the Army Corp of Engineers and the Thruway Authority to make the project come to fruition.